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EXAMINER	
DINH, DUC Q	

ART UNIT	PAPER NUMBER
2674	

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/804,383	HINCKLEY ET AL.	
	Examiner	Art Unit	
	DUC Q. DINH	2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 December 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 01/10/06
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

07

DETAILED ACTION

1. This is response to the Amendment filed on December 20, 2005. Claims 1-31 are pending in the application. Claims 1, 9, 20 are currently amended.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 7, 9, 16-26 and 28-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Murai et al. (U. S. Patent No. 5,635,958), hereinafter Murai

In reference to claim 1, Murai discloses a computer system, in one embodiment (Figs. 13-14) including auxiliary control (keyboard having key switch 18 and key top 19), a method comprising a steps of:

detecting a first physical proximate to or contacting the first auxiliary control (a finger is in contact with or proximity to a key; col. 7, lines 26-27) in which the first auxiliary control maintains in inactive state; and

generating feedback responsive to the step of detecting, the feedback including an indication of plurality of applications (Figs. 14,15) providing an indication of the functionality of the first auxiliary control, the functionality of the first auxiliary control associated feedback

being dependent upon which one of the plurality of applications is active (as shown in Fig. 14, the brightness of a specific icon "translate" changes, col. 7, lines 25-31).

In this embodiment of his invention, Murai does not disclose detecting a physical presence proximate to or contacting an auxiliary control for a predetermined period. However, in the other embodiment of his invention (Figs. 1-2), Murai discloses the display operation associated with a key top is touched or approached by a finger at regular interval (detecting a physical presence proximate to or contacting an auxiliary control for a predetermined period; col. 4, lines 29-32).

It would have been obvious for one of ordinary skill in the art to provide the step of detecting a physical presence proximate to or contacting an auxiliary control for a predetermined period discloses in Figs 1-2 in the embodiment the one embodiment shown in Fig. 13-14, because this would provide the time for the system to make the decision as to the keytop is touched or approached by the finger at regular time interval to provide the display feedback. (col. 4, lines 29-32)

In reference to claim 7, Murai discloses a display screen 10 (Fig, 13) and the step of generating includes the step of displaying a first displaying widget on the display screen responsive for the step of detecting. (Fig. 14, the translate icon is brighter).

In reference to claims 9, refer to the rejection as applied to claims 1-7. Murai discloses in the embodiment discloses in Fig. 15, a text macro and displays at least a portion of text corresponding to the text macro (translate the data in the designated area) associated with the first auxiliary control.

It would have been obvious for one of ordinary skill in the art to provide the text macro associated with the auxiliary control as discloses in Fig. 15 to the embodiment in Fig. 14 for providing a descriptive statement for providing detail of the icon's functionality, i.e.: translate the data in the designated area associated.

In reference to claims 16-17, Murai discloses each icon is displayed in correspondence with the physical position in the horizontal and vertical directions of each key. In the process, assume that a finger is in contact with or in proximity to a key. As shown in FIG. 14, the brightness of a specific icon changes, thereby indicating that execution of a corresponding process is anticipated. That implied when a second physical presence proximate to or contact to any key (second auxiliary control different from first auxiliary control); the brightness of the specific icon is changed (generating other feedback displaying second display widget) responsive to the step of detecting; discontinuing display the first display widget responsive to detecting the second physical presence (dimming the previous brighten icon) [Figs. 14, col. 16-31].

In reference to claim 18, refer to the rejection as applied to claim 1. In addition, Murai discloses in Fig. 17-19, Murai discloses in Fig. 18A while the switch 21 is not depressed, the finger positions in proximity to each keytop 1 are indicated as a bitmap combination of small pot (detecting the first physical presence proximate to a first auxiliary control in which the control is an inactive state and generating feedback indication of the functionality of the keyboard as bit map), with the approach of the finger to the proximity sensor 22 (detecting a second physical presence proximate to a second auxiliary control different from first auxiliary control) set of characters corresponding to the keytops are displayed distinctly on the screen as shown in Fig.

18B (generating other feedback responsive to the step of detecting the second physical, the other feedback indicating functionality associated with the combination of the first auxiliary for the first and the second controls).

In reference to claim 19, Murai discloses the first auxiliary control is a keytop 1, and second auxiliary control is the key switch 20 on the keyboard input device in Fig. 17.

In reference to claim 20, Murai discloses the in Fig. 15, refer to the rejection as applied to claim 1 for the step of detecting a first physical presence to a first auxiliary control without activating the control. In addition, Murai discloses in the embodiment discloses in Fig. 15, tool tip (translate) associated with the first auxiliary control, the tool tip (translate) indicating one of the identity of a user (translating the document; Fig. 15 shows a display screen, in which a descriptive statement of the icon, i.e.: tool tip, changed in color is display on the display) and the application, i.e. translate, that will be launch by activating the first auxiliary control (the brightness of the specific icon changes... A subsequent depression of the key address and executes an actual process; col. 7, lines 25-32).

In reference to claims 21-22, Murai discloses the computer system with keyboard including a first auxiliary control (computer system in Fig. 13 with keyboard and control 19 is a button).

In reference to claim 23, Murai discloses the first auxiliary is a combination of keys (col. 7, lines 61-65).

In reference to claim 24, Murai shows in Fig. 19 and acceleration sensor 27 is mounted in a lower portion of the housing in the palm rest area 25 and act as mouse (pointing device) and button or key 1 as auxiliary control.

In reference to claim 25, Fig. 15 shows the tool tip (translate data in designated area) identifies an application will be launch by activating the control.

In reference to claim 26, Fig. 15 shows the application is one of the file explorer as claimed.

In reference to claim 28, refer to the rejection as applied to claim 16. In addition, Fig. 15 shows a tool tip which is a descriptive statement of the icon (translate data in designated area for the translating application icon) associated with the second auxiliary control.

In reference to claim 29, Murai discloses in Fig. 17-18 the step of displaying the second widget includes displaying the second widget with responsive to simultaneous detection of the first physical and the second physical presence (the operator can know the corresponding characters by bringing the finger toward the proximity sensor 22 and the keytops at the same time to display a window bit map associated with the combination of the first and second controls; col. 7, lines 60-65) and display a second display widget representing a tool tip associated with the combination of the first and second controls.

4. Claims 2, 5-6, 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murai in view of Clark et al. (U. S. Patent No. 5,995,101), hereinafter Clark.

In reference to claims 2, 5 and 30 Murai does not disclose the feedback includes acoustic feedback. Clark discloses multilevel tool tip system that include a sound feedback to provide the information when a user points with a pointing device to an area of an graphical object such as icon (col. 1, lines 44-53 and col. 2, lines 1-5).

It would have been obvious for one of ordinary skill in the art at the time of the invention to provide the acoustic (sound) feedback in the system of Murai in view of the teaching of Clark because it would provide users to obtain detailed information about the function associated with a control, such as tool bar or icon (col. 1, lines 64-68).

In reference to claims 6 and 27, Murai discloses pointing device 27 acts as mouse (pointing device) in Fig. 19 so that the user can make entry either by way of keyboard or mouse. Accordingly, Murai discloses everything except the step detecting a first period for a pointing device maintain in inactive state. Clark discloses tool tips that provide details information about function associated with icons. The tool tip 50 appears on the computer display 28 when a user places a cursor over an icon 54 in a predetermined period (first period) in which the pointing device maintain an inactive state (col. 1, lines 20-25).

It would have been obvious for one of ordinary skill in the art at the time of the invention to provide detecting the period of the pointing device (the mouse) in inactive state in the system of Murai, in view of the teaching of Clark because it would provide additional control condition for the system to display the tool tips (col. 1, lines 20-21).

In reference to claim 10, Murai discloses the indication of the display operation which provide the guide separately from an information input, disappears when the finger is released (detecting an absence of the physical presence or contacting the control; col. 4, lines 48-50) satisfying the limitation detecting absent of the first physical presence of contacting the first auxiliary control for a second predefined period in which the firs auxiliary control maintains the inactive state while displaying the first display widget; and discontinuing display of the first

display widget, responsive to detecting the absence of the first physical presence for the second predefined period in which the firs auxiliary control maintains the inactive state.

In reference to claim 11, Murai does not disclose the step of discontinuing display the first widget responsive to activation of a second auxiliary control. Clark discloses the subsequent level tool tips (discontinuing display the first widget and provide new information next level tool tip) may be invoked or triggered by activating a keystroke or keystroke combination (activation of a second auxiliary control) satisfying the claimed limitation discontinuing display the first display widget (first level tool tip) responsive to activation of a second auxiliary control (col. 2, lines 64-68, col. 3, lines 1-7).

It would have been obvious for one of ordinary skill in the art at the time of the invention provide the method disclosed by Clark, activating a keystroke to provide subsequent tool tips, in the system of Murai because it would provide the users detailed information about the function associated with a control area. (col. 1, lines 65-67)

In reference to claim 12, Clark discloses one or more selected keystrokes may be used to closed a tool tip (deactivation of the second auxiliary control) either leaving prior level tool tip display (displaying the first display widget) satisfying the claimed limitation (col. 3, lines 1-5).

In reference to claim 13, Murai discloses each icon is displayed in correspondence with the physical position in the horizontal and vertical directions of each key. In the process, assume that a finger is in contact with or in proximity to a key (first auxiliary control). As shown in FIG. 14, the brightness of a specific icon changes, thereby indicating that execution of a

corresponding process is anticipated. A subsequent depression of the key (second auxiliary is the first auxiliary) addresses and executes an actual process (col. 7, lines 25-31).

In reference to claim 14, Clark discloses the step of deactivation the second auxiliary control for display second level of the tool tip (disabling the first display widget; col. 2, lines 64-68), and Murai discloses the step of releasing a finger causes the indication disappeared (the first physical presence breaks contact with the auxiliary control; col. 4, lines 48-50).

In reference to claim 15, refer to the rejection as applied to claim 13.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murai (U. S. Patent No. 5,635,958) in view of Grant (U. S. Patent No. 5,854,624).

In reference to claim 3, Murai does not disclose the computer system has a game controller including the first auxiliary control. Grant discloses a keyboard using as game controller (Fig. 5, col. 6, lines 3-6).

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify the keyboard system of Murai to have the game controller for the computer system in view of the teaching of Grant because it would provide users with significant advantages over the keyboard device (col. 5, lines 9-10).

6. Claims 4 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murai in view of Barber et al. (U. S. Patent No. 5,973,670), hereinafter Barber.

In reference to claim 4 and 30, the Murai does not disclose the feedback includes tactile feedback. However, Barber discloses a tactile feedback system for an input device.

It would have been obvious for one of ordinary skill in the art at the time of the invention was made to provide the Barber's tactile controller in the system of Mura for providing additional feedback for the system to detect the cursor is at the boundary of a graphical object for precisely selecting the graphical object. (col. 1, lines 40-44)

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murai in view of Johnson (U. S. Patent No. 6,246,405).

In reference to claim 8, Murai does not disclose the display widget includes a user interface through which a user may change the settings of the functionality of the first auxiliary control. Johnson discloses a widow (display widget) for changing the setting of the hot keys (functionality of the auxiliary control) as claimed.

It would have been obvious for one of ordinary skill in the art at the time of the invention to provide the window for setting the hot keys in the system of Murai in view of the teaching of Johnson because it would provide a system that conveniently manages objects on the desktop GUI, particularly when working with a plurality of active applications (col. 2, lines 20-24).

Response to Arguments

8. Applicant's arguments filed December 20 are have been fully considered but they are not persuasive. With respect to amended claim 1, as discussed above, Murai discloses the circuit of FIG 14 in which the feedback includes an indication of plurality of applications, i.e. print, copy, translate, erase... as claimed. With respect to claim 9, FIG. 15 of Murai shows a display screen, in which a descriptive statement of the icon changed in color is displayed on the display screen

of FIG. 14. The description of the function of each icon corresponding to the physical position of the keytop contacted is thus displayed in the lower portion, i.e. translate the data in the designate area, corresponding to the claimed text macro that displays at least a portion of text of the text macro as claimed. With respect to claim18, Fig. 17-19, Murai discloses in Fig. 18A the finger positions in proximity to each keytop 1, i.e:, first auxiliary control, are indicated as a bitmap combination of small pot (detecting the first physical presence proximate to a first auxiliary control in which the control is an inactive state and generating feedback indication of the functionality of the keyboard as bit map), with the approach of the finger to the proximity sensor 22 (detecting a second physical presence proximate to a second auxiliary control different from first auxiliary control) set of characters corresponding to the keytops are displayed distinctly on the screen as shown in Fig. 18B (generating other feedback responsive to the step of detecting the second physical, switch 22, the other feedback indicating functionality associated with the combination of the first auxiliary control, i.e: key top 1, for the first and the second controls). With respect to claim 20, Murai discloses in the embodiment discloses in Fig. 15, tool tip (translate) associated with the first auxiliary control, the tool tip (translate) indicating one of the identity of a user (translating the document; Fig. 15 shows a display screen, in which a descriptive statement of the icon, i.e.: tool tip, changed in color is display on the display). Therefore, the rejection is maintained.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DUC Q. DINH whose telephone number is (571) 272-7686. The examiner can normally be reached on Mon-Fri from 8:00.AM-4:00.PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edouard Patrick can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DUC Q DINH
Examiner
Art Unit 2674

DQD
February 28, 2006

PATRICK N. EDOUARD
SUPERVISORY PATENT EXAMINER